

Commonwealth of Massachusetts Division of Fisheries & Wildlife Route 135 Westborough, MA 01581 (508) 792-7270 ext. 200

MASSACHUSETTS PLANTS OF SPECIAL CONCERN

SEABEACH NEEDLEGRASS (Aristida tuberculosa Nutt )

## Description

Seabeach Needlegrass is an annual grass of medium height (10-25 inches, 30-60 cm) with a small fibrous root system. It grows in patches, which from a distance have a coppery hue. Plants produce one to several shoots from a central point at ground level. These shoots have few leaves but support several flowering spikes tipped by long awns. In immature plants the awns stick straight up. When seeds mature in late summer/early fall, the awns turn a pale straw color, coil tightly along the basal portion, and project perpendicular to the stem. These twisted awns aid in the implantation of the seed.



Gleason, H.A. The New Britton and Brown Illustrated Flora of the Northeastern U.S. and Adjacent Canada N.Y. Botanical Garden, 1952.

## Similar Species

The perennial, Purple Needlegrass (Aristida purpurascens) is similar in appearance but is darker, having a more purple-brown hue. The inflorescence has a narrower appearance due, in part, to the shorter awns (1.5-2.5 cm versus 2.5 cm in A.tuberculosa) which are not coiled at the base. Purple Needlegrass is a rare plant of dry grasslands and is not found in the dunes where Seabeach Needlegrass grows.

## Habitat in Massachusetts

Seabeach Needlegrass is found on stable dunes growing in association with Beach Heather (*Hudsonia tomentosa*). Occasionally it is also found in gravel pits or on sandy roadsides, since this specie is somewhat adventive and can colonize disturbed sites.



Massachusetts Distribution by Town

Verified since 1978Reported prior to 1978

Range of Seabeach Needlegrass Range

Seabeach Neddlegrass is found along the coast from Massachusetts to Georgia and from Indiana to Minnesota and Iowa.

## Population Status

Seabeach Needlegrass is listed as "Special Concern" in Massachusetts. It is also considered rare in Connecticut, Iowa, Illinois, Indiana, Maryland, Michigan, Minnesota, New Hampshire, and Virginia. There have been eight recent (since 1978) verified occurrences of Seabeach Needlegrass and four historical (prior to 1978) occurrences in Massachusetts. Threats to this species include heavy recreational use of the dunes which results in destabilization and loss of habitat. Further habitat loss occurs with the succession of the habitat from its early open stage to shrub and pine thickets. For unknown reasons, this species has never been found on the extensive dune systems of Cape Cod and the Islands.